

## TEXAS CUPGRASS

*Eriochloa sericea* (Scheele)

**Munro ex Vasey**

plant symbol = ERSE5

*Contributed by: USDA NRCS Kika de la Garza Plant Materials Center*

### Uses

Texas cupgrass is a highly palatable forage grass (Gould, 1975). It is readily eaten year round by all classes of livestock. It can be used as a component in native range restoration projects.

### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

### Description

*General:* Texas cupgrass (*Eriochloa sericea*) is a tufted, warm-season, perennial grass that grows 3 to 3 ½ feet in height (Correll & Johnston, 1996). This erect grass is a member of the *Panicaceae* tribe of grasses (Hitchcock, 1971). There is no known commercial variety of Texas cupgrass.

*Distribution:* For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

*Habitat:* Texas cupgrass grows mostly on well-drained prairies, and brushy, rocky slopes with tight loamy soils (Correll & Johnston, 1996).

### Adaptation

Texas cupgrass is found in Oklahoma, Texas, and Northern Mexico (Gould, 1975). In Texas, it can be found in North Central Texas, the eastern portion of the Rolling Plains, south to the eastern part of the Edwards Plateau and the Rio Grande Plains, and rarely on a few sites in East Texas (Correll & Johnston, 1996). It prefers clay and clay loam soils (Hatch, Schuster, & Drawe, 1999).

### Establishment

Texas cupgrass can be grown from seed. A 1990 germination test conducted by the Kika de la Garza Plant Material Center staff yielded 50 percent

germination. A second germination test conducted in the summer of 2000, yielded approximately 40% germination after only 14 days at 20°C for 12 hours of darkness and 30°C for 12 hours of light.

### Management

Texas cupgrass survives only under moderate grazing pressure (Gould, 1975). It will persist in overgrazed pastures only under the protection of shrubs (Hatch, Schuster, & Drawe, 1999). Texas cupgrass is an indicator of good range condition. It is seldom a key management species; however, because it rarely dominates a site.

### Seeds and Plant Production

Texas cupgrass has several problems from a seed production standpoint. First of all, some of the taller plants tend to lodge, which makes harvesting seed a problem. Second, seed retention is poor. Seed shatter tends to occur fairly rapidly after the seed has ripened making it difficult to harvest a stand because all the heads do not ripen at once. Third, there appears to be an ongoing problem with spittlebugs on the seed heads, which decreases the quantity of viable seed. Finally, Texas cupgrass appears to be susceptible to smut on the seed heads, a problem which can also affect seed quality.

In an attempt to increase seed retention, a study was conducted at the Kika de la Garza PMC in the spring of 2000 with Texas cupgrass. Treatments of Spodnam, a chemical used to increase seed retention, were tried with no success. The plants treated with Spodnam and the untreated plants showed no significant difference in seed retention (Kika de la Garza PMC, 2000).

### References

- Correll, D.S. & M.C. Johnston 1996. *Manual of the vascular plants of Texas*. The University of Texas at Dallas, Richardson, Texas.
- Gould, F.W. 1975. *The Grasses of Texas*. Texas A&M University Press, College Station, Texas.
- Hatch, S L., J.L. Schuster, & D.L. Drawe 1999. *Grasses of the Texas Gulf prairies and marshes*. Texas A&M University Press, College Station, Texas.
- Hitchcock, A.S. 1971. *Manual of the grasses of the United States, Volumes 1&2, 2<sup>nd</sup> edition*. Revised by Agnes Chase. Dover Publications, New York.

Kika de la Garza Plant Materials Center 2000. *A seed retention study of Texas cupgrass and Plains bristlegrass*. Technical Note, vol 3 (3).

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For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS <<http://plants.usda.gov>> and Plant Materials Program Web sites <<http://Plant-Materials.nrcs.usda.gov>>.

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